

What is claimed is:

~~CLAIMS:~~

1. A method for applying a treating agent onto a moving surface, in which:
- a treating agent is fed into at least one feeding chamber (3), and
  - 5 - the treating agent is directed from the feeding chamber (3) towards a moving surface (1),
- characterized in that**
- jets are formed from the treating agent by directing the agent through at least one nozzle plate (6) comprising openings (10) that are defined by the nozzle plate (6) around the entire periphery, and
  - 10 - the formed jets are applied directly onto the moving surface (1).
2. A method according to claim 1, **characterized** in that the formed jets are applied directly onto the surface of the web to be treated.
3. A method according to claim 1, **characterized** in that the jets are directed at a surface that transfers the treating agent onto the surface of a web, such as a film transfer roll or a belt.
- 15 4. A method according to claim 1, **characterized** in that the jets are directed at the roll nip between the web to be treated and the surface that effects the transfer, whereupon part of the treating agent goes directly onto the web and part onto the surface that gets in contact with the web.
- 20 5. A method according to claim 1, **characterized** in that the treating agent is fed through a screen plate (4) in the feeding chamber (3).
6. A method according to any of the preceding claims, **characterized** in that, for example, for cleaning, the nozzle plate (6) is moved in the transversal direction to the direction of movement of the moving surface, so that part of the length of the nozzle plate (6) can be moved outside the width of the area to be treated of the moving surface.
- 25 7. A method according to any of the preceding claims, **characterized** in that steam is blasted against at least the nozzle plate (6) to keep the plate (6) clean.
- 30 8. A method according to any of claims 1 to 6, **characterized** in that a needle-shaped water jet (15) is directed at the openings (10) of the nozzle plate (6) to clean the openings (10).

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9. A method according to any of claims 1 to 6, **characterized** in that an ultrasound is directed at the nozzle plate (6) to clean the plate.
10. According to any of the preceding claims, **characterized** in that the amount of treating agent fed onto the web is measured on the basis of the volume flow measurement of the treating agent.
- 5 11. An arrangement for spreading the treating agent onto a moving surface, comprising:
- at least one feeding chamber (3), into which the treating agent can be fed, and
  - means (6, 10) for directing the treating agent from the feeding chamber (6) onto the moving surface,
- 10 **characterized in**
- at least one nozzle plate (6) that at least partly closes at least one feeding chamber (3), the plate comprising openings (10), which are defined by the nozzle plate (6) around the entire periphery, to form jets of the treating agent and directing them onto the moving surface.
- 15 12. An arrangement according to claim 11, **characterized** in a screen plate (4) fitted in the feeding chamber (3) to screen the treating agent before directing it at the nozzle plate (6).
- 20 13. An arrangement according to claim 11 or 12, **characterized** in a screen plate (6), the length of which is greater than the width of the area of the moving surface that is to be treated, and members (11) to move the screen plate (6) at least partly outside the width of the area to be treated, for example, for cleaning.
- 25 14. An arrangement according to claim 11, 12 or 13, **characterized** in at least one steam nozzle (13) for blowing steam at least towards the nozzle plate (6).
15. An arrangement according to claim 11, 12 or 13, **characterized** in at least one needle-shaped water jet, which can be directed at the openings (10) of the nozzle plate (6).
- 30 16. An arrangement according to claim 12, **characterized** in a blade plate (12) that is fitted to move in the feeding chamber (3), so that at least one of its edges scrapes the screen plate (4) or the nozzle plate (6).
17. A screen plate in an arrangement for spreading the treating agent onto a moving surface, comprising:
- at least one feeding chamber (3), into which the treating agent can be fed, and

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- members (6, 10) for directing the treating agent from the feeding chamber (6) onto the moving surface,

characterized in that the screen plate (6) has openings (10) that are defined by the nozzle plate (6) around the entire periphery.

- 5 18. A screen plate according to claim 17, characterized in that the screen plate (6) comprises one row of openings.
19. A screen plate according to claim 17, characterized in that the screen plate (6) comprises several rows of openings.

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